

WHAT IS CLAIMED IS

1. A method for updating data for a non-volatile memory broken down into a plurality of similar memory subdivisions that can be erased independently of each other and among which at least two memory subdivisions are reserved for updating data contained in each of said subdivisions, wherein the method includes the following
5 steps:
 - a) erasing a first reserved memory subdivision if none of said reserved memory subdivisions has been erased beforehand;
 - b) saving the data from a non-reserved memory subdivision to be updated in said
10 first erased reserved memory subdivision or in a previously erased reserved memory subdivision;
 - c) simultaneously erasing said non-reserved memory subdivision and a second reserved memory subdivision;
 - d) updating the data from said non-reserved memory subdivision;
 - e) reiterating steps b) to d) for all the other non-reserved memory subdivisions to
15 be updated.
2. The method according to claim 1, wherein the step b) is broken down into two sub-steps:
 - b1) copying the data from the non-reserved memory subdivision into external
volatile storage means; and
 - 20 b2) copying the data from said external volatile storage means into said first erased reserved memory subdivision or into said previously erased reserved memory subdivision.
3. The method according to claim 2, wherein step d) is broken down into two sub-steps:
 - 25 d1) updating the data contained in the external volatile storage means used in step b);
 - d2) copying the updated data from the external volatile storage means into the memory subdivision to be updated.
4. The method according to claim 1, wherein a checking sector is associated with
30 each of the reserved memory subdivisions, wherein
 - during step a), a checking sector associated with the first erased reserved memory subdivision, is simultaneously erased if none of the reserved memory subdivisions have been erased beforehand;
 - during step c), a checking sector associated with the second erased reserved
35 memory subdivision, is simultaneously erased;

the method includes an additional step f) carried out between steps b) and c) consisting in:

- f) registering a data item in a checking sector of the reserved memory subdivision used previously during step b), indicating the use of the latter.
- 5 5. The method according to claim 4, wherein the size of the checking sector of each of the reserved memory subdivisions is adapted to the number of non-reserved memory subdivisions and in that the additional step f) the consists in:
- f) registering the number or the address of the non-reserved subdivision to be updated in the checking sector of the reserved memory subdivision previously used during step b).
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6. The method according to claim 1, wherein a cyclical redundant check is implemented parallel to the method.
7. The method according to claim 1, wherein the number of reserved memory subdivisions corresponds to $1/8^{\text{th}}$ of the number of non-reserved memory subdivisions.